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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/420,806	10/19/1999	KAZUHIRO TSUJINO	991206	3316

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EXAMINER

NGUYEN, LUONG TRUNG

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 04/07/2004

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/420,806

Applicant(s)

TSUJINO ET AL.

Examiner

LUONG T NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 8-12 is/are rejected.
- 7) ☒ Claim(s) 4-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 1/23/2004 have been fully considered but they are not persuasive.

In re page 11, Applicants argue that there is no disclosure or teaching of a timing generator for causing exposure according to exposure data held in said first register in response to said timing signal; and a processor for starting to count said timing signal in response to an instruction of said instruction key, and performing an update process to update said exposure data held in said first register in first determined timing. And the combination rejection under Miyake and Horii fails to render the claimed invention.

In response, the Examiner disagrees. Regarding claim 1, Applicant claimed the limitation "a timing generator for causing exposure according to exposure data held in said first register in response to said timing signal; and a processor for starting to count said timing signal in response to an instruction of said instruction key, and performing an update process to update said exposure data held in said first register in first determined timing." The Examiner considers that claim 1 as claimed still does not distinguish from Miyake patent in view of Horii patent. Miyake discloses a timing generator for causing exposure according to exposure data held in said first register in response to said timing signal (clock generator 24 supplies clock signal to CCD control circuit 48 for causing exposure, figure 1, column 10, lines 11-53), and a processor for starting to count said timing signal in response to an instruction of said instruction key (Every

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time imaging is performed for each frame, the CPU 23 increments the number of frames continuously taken one beginning with 1, figure 1, column 9, lines 33-40), and performing an update process to update said exposure data held in said first register in first determined timing.

In re page 14, Applicants argue that Horii fails to disclose or remotely suggest anything about such an operation as continuously shooting a subject with different exposures.

In response, it should be noted that Miyake discloses this feature (column 8, line 48 – column 9, line 40).

Claim Objections

2. Claims 9-12 are objected to because of the following informalities:

Claim 9 (line 3), “a single generator” should be changed to --a signal generator--.

Claim 9 (line 4), “exposures data” should be changed to --exposure data--.

Claims 10-12 are objected as being dependent on claim 9.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-3, 8 -12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyake (US 5,767,904) in view of Horii (US 6,018,363).

Regarding claim 1, Miyake discloses a digital camera for performing continuous shots of a subject with different exposures, comprising a first register for holding exposure data (the internal RAM of CPU 37 stores shutter speed data, column 14, lines 1-5); a timing generator for causing exposure according to exposure data held in said first register in response to said timing signal (clock generator 24, figure 1, column 10, lines 11-53); an instruction key for instructing for a continuous shot operation (single/continuous switch 36, figure 1, column 8, lines 45-64); a processor for starting to count said timing signal in response to an instruction of said instruction key (Every time imaging is performed for each frame, the CPU 23 increments the number of frames continuously taken one beginning with 1, figure 1, column 9, lines 33-40), and performing an update process to update said exposure data held in said first register in first determined timing (column 9, lines 60-67).

Miyake fails to specifically disclose a signal generator for generating a timing signal. However, Horii discloses a synchronous signal generator 107 for generating timing signal supplied to timing generator 112 (figure 5, column 10, lines 1-19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Miyake by the teaching of Horii in order to generate timing signal for control data read out from image sensor in a camera.

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Regarding claim 2, Miyake discloses an image sensor (CCD 11, figure 1), wherein said timing generator controls a charge storage period on said image sensor according to said exposure data held in said first register (column 1, lines 20-22).

Regarding claim 3, Miyake discloses wherein said processor starting to count said timing signal in response to an instruction of said instruction key (Every time imaging is performed for each frame, the CPU 23 increments the number of frames continuously taken one beginning with 1, figure 1, column 9, lines 33-40) and performs a record process to record shot image data obtained by said exposure in second predetermined timing (shot image data is stored in memory card 19, figure 1).

Regarding claim 8, Miyake discloses wherein said processor performs an adjustment process of said exposure over a predetermined period after ending said continuous shot (column 22, lines 1-6).

Regarding claims 9-12, all the limitations are contained in claims 1-3, 8, respectively. Therefore, see Examiner's comment regarding claims 1-3, 8.

Allowable Subject Matter

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5. Claims 4-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T NGUYEN whose telephone number is (703) 308-9297. The examiner can normally be reached on 7:30AM - 5:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LN LN
4/2/2004



NGOE-YEN VU
PRIMARY EXAMINER